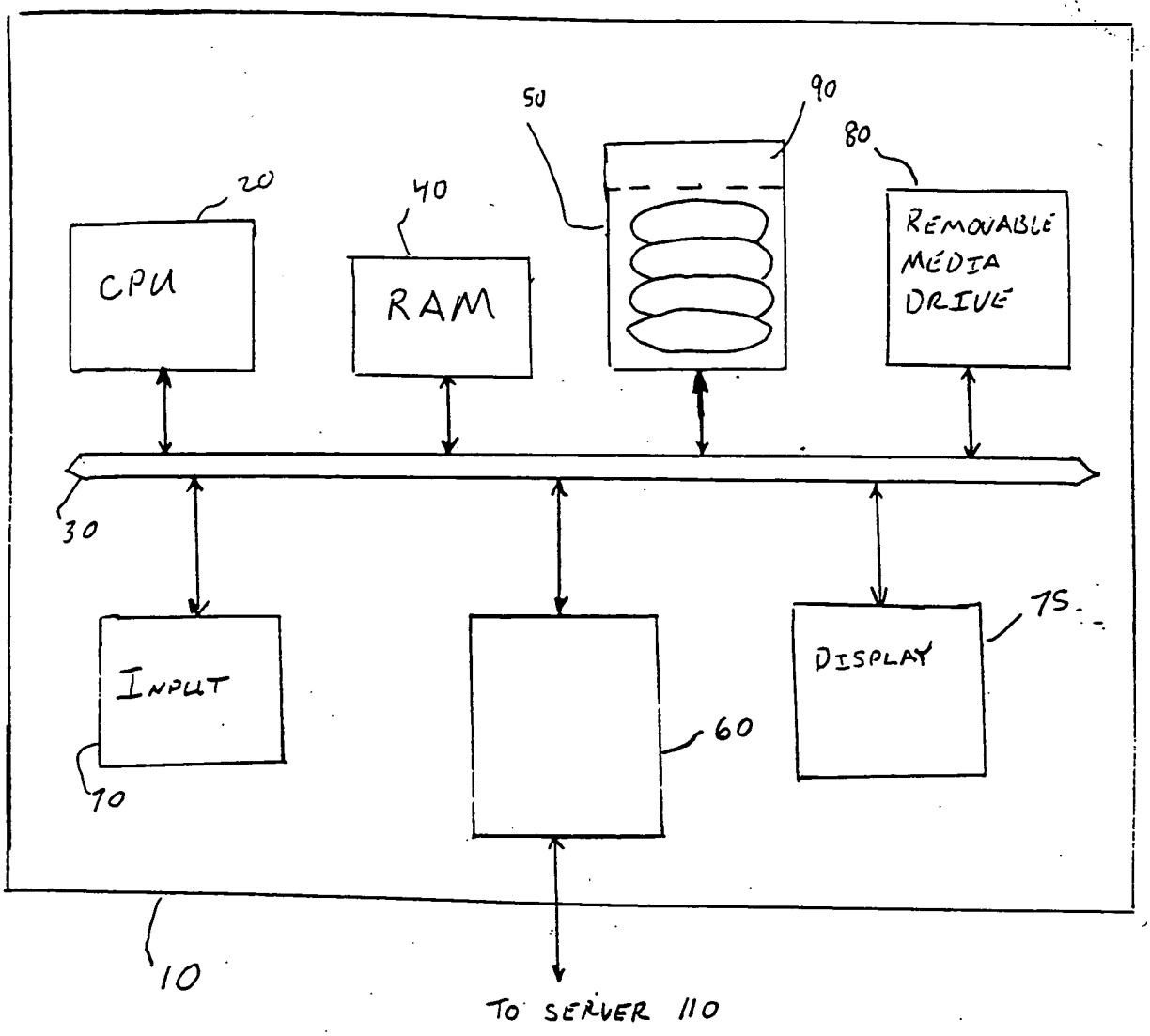

50
90
80
20
40
CPU
RAM
REMOVABLE MEDIA DRIVE
30
INPUT
75
DISPLAY
60
70
10
TO SERVER 110

FIG. 1

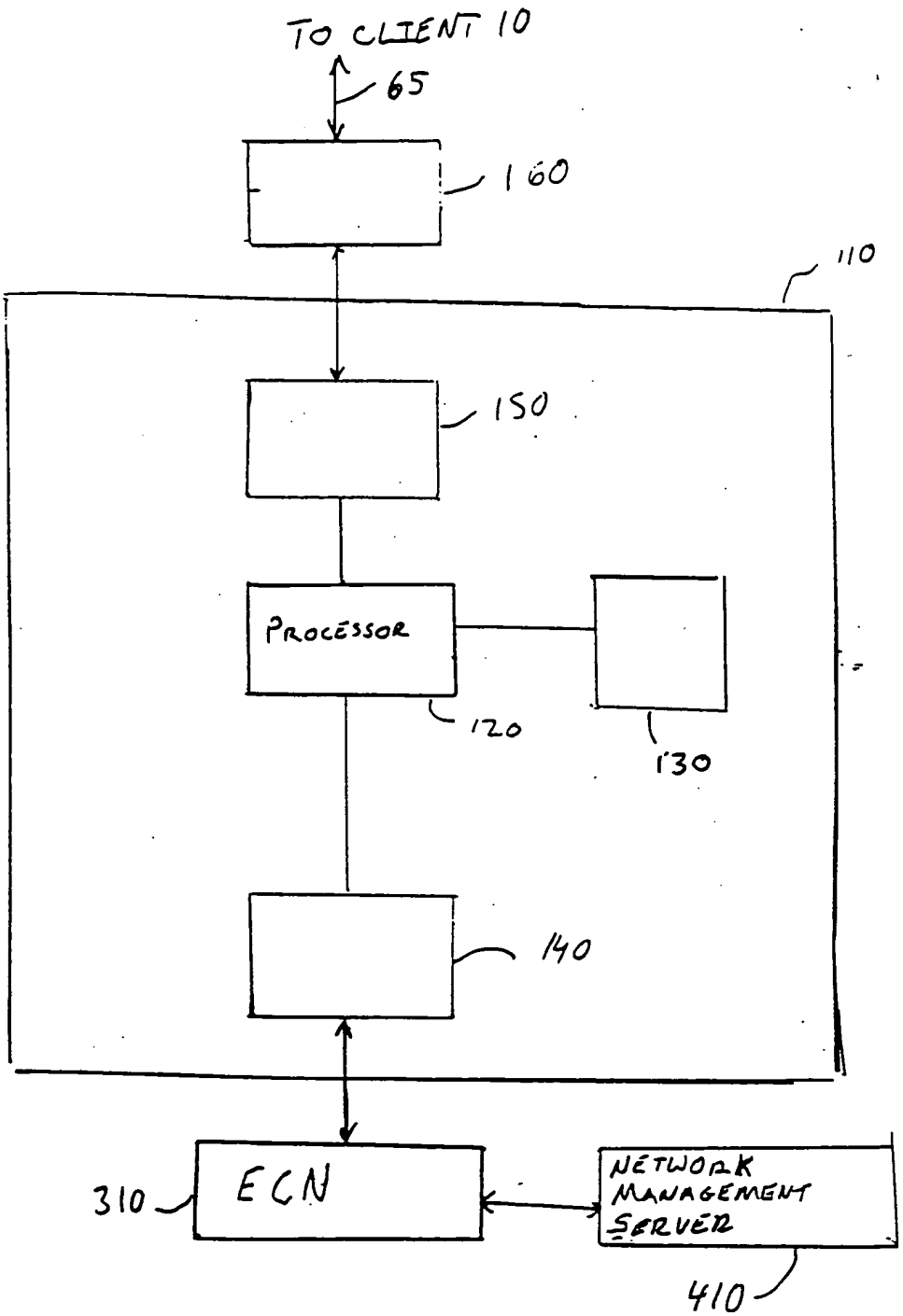

TO CLIENT 10
65
160
110
150
PROCESSOR
120
130
140
310
ECN
NETWORK MANAGEMENT SERVER
410

FIG. 2

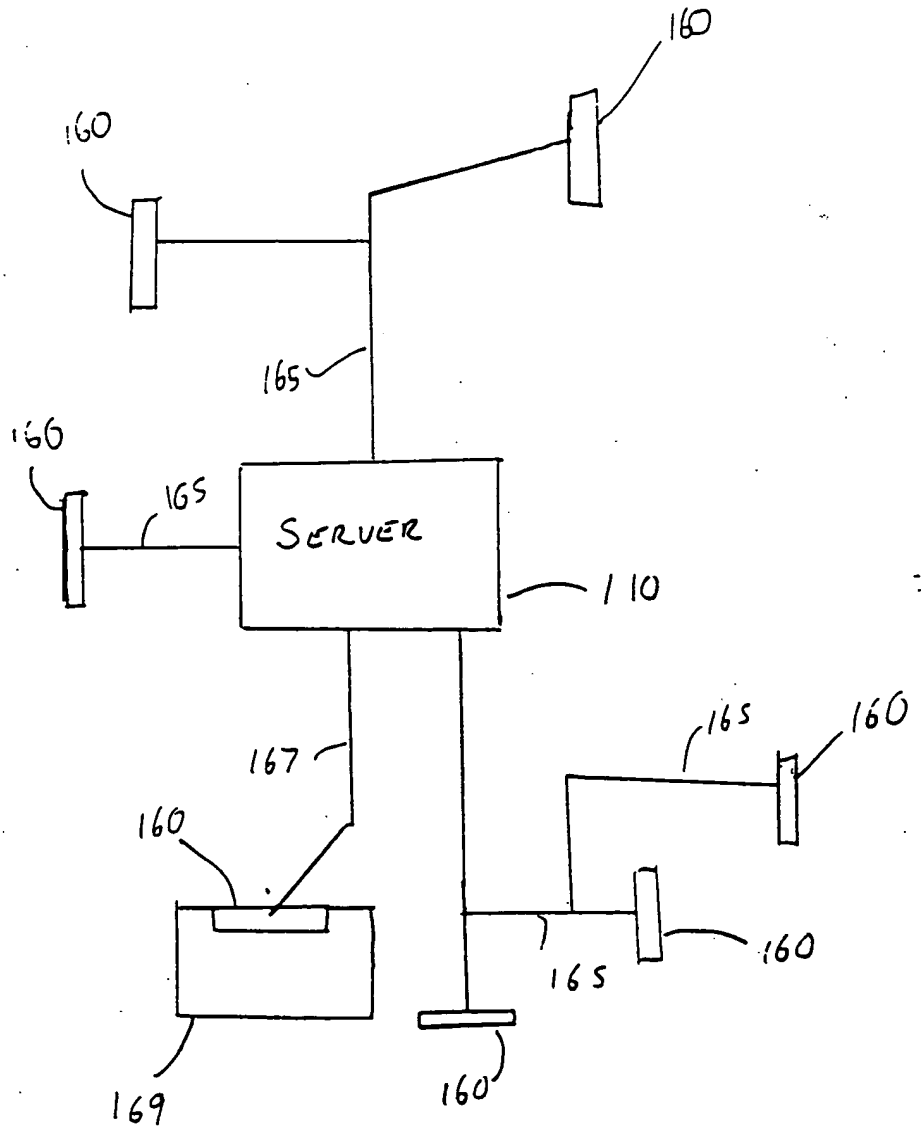

160
160
165
160
165
SERVER
110
165
160
167
160
160
165
160
169
160

FIG. 3A

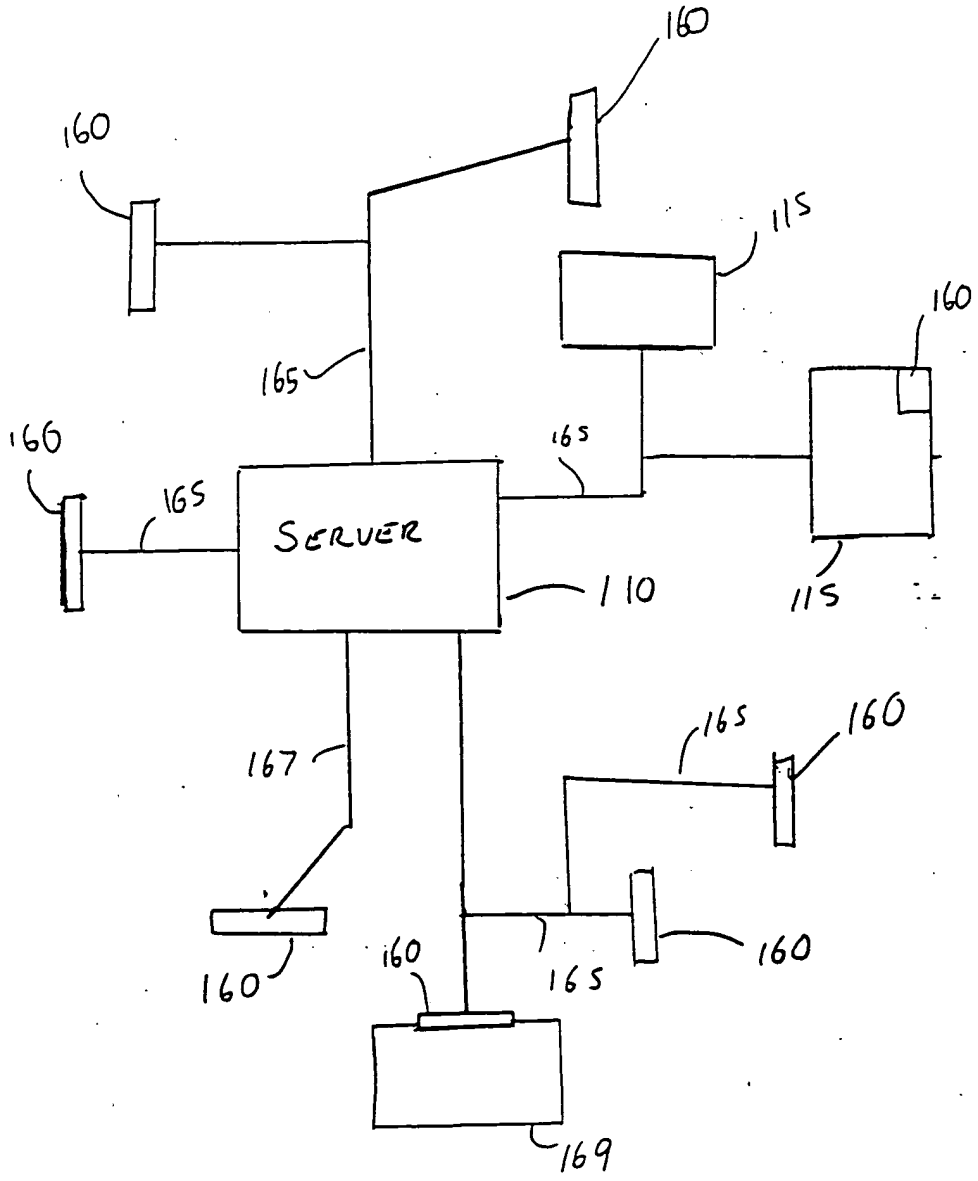

160
160
115
160
165
166
165
165
SERVER
110
115
167
165
160
160
160
165
160
169

FIG. 3B

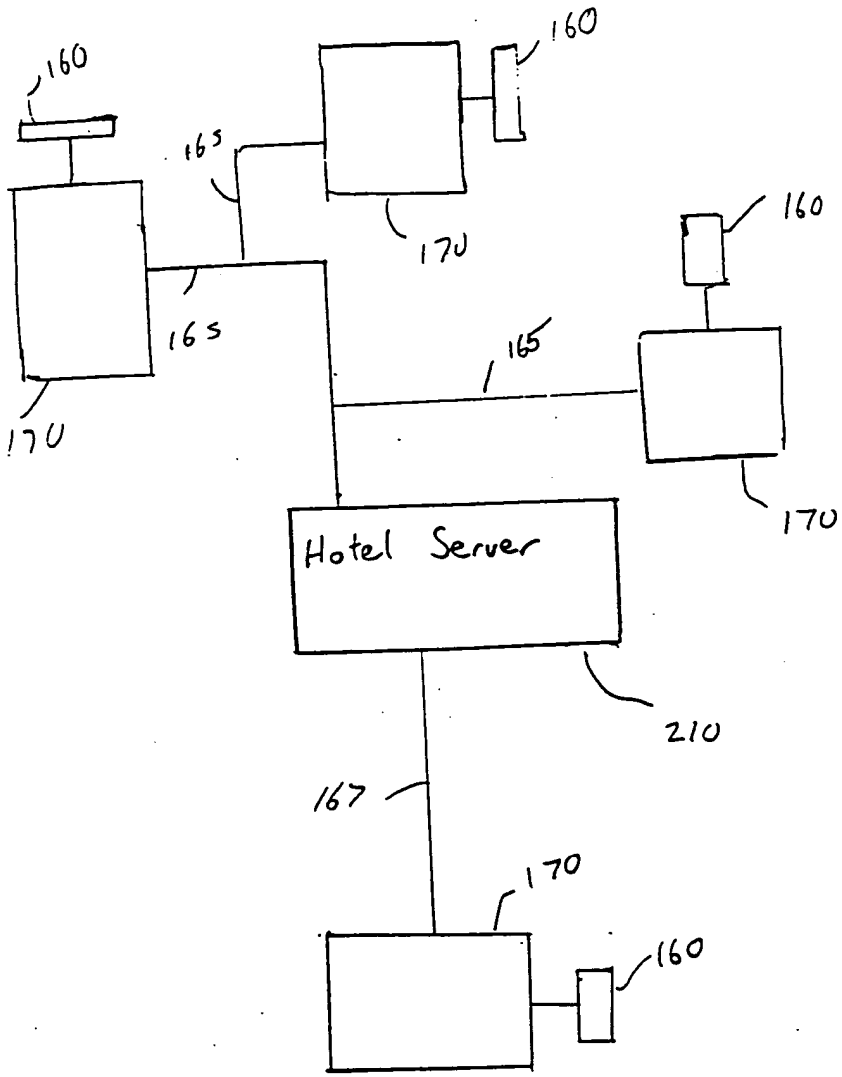

160
160
165
170
160
165
165
170
170
Hotel Server
210
167
170
160

FIG. 4A

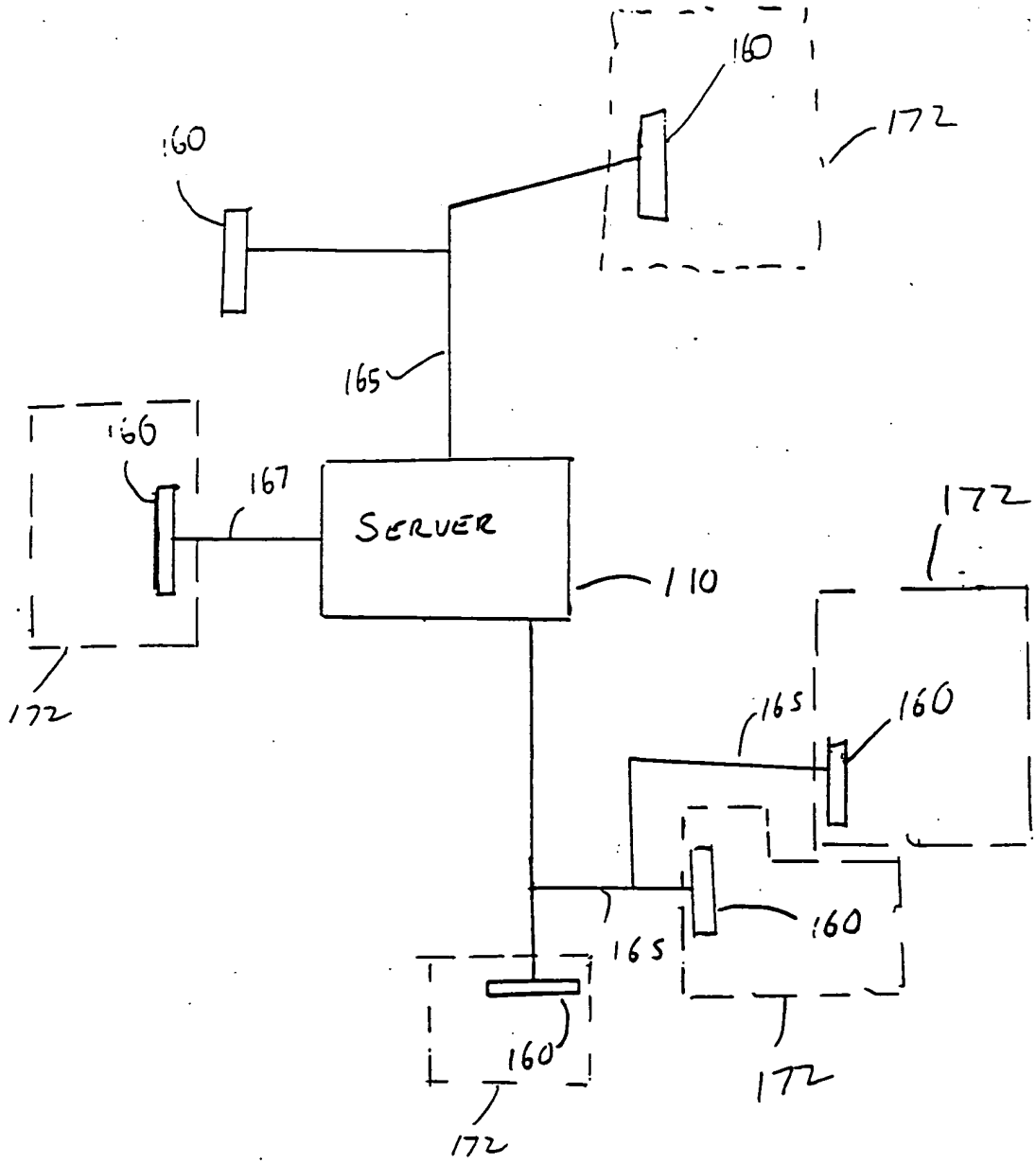

160
172
160
165
166
167
SERVER
110
172
172
165
160
165
160
160
172
172

FIG 4B

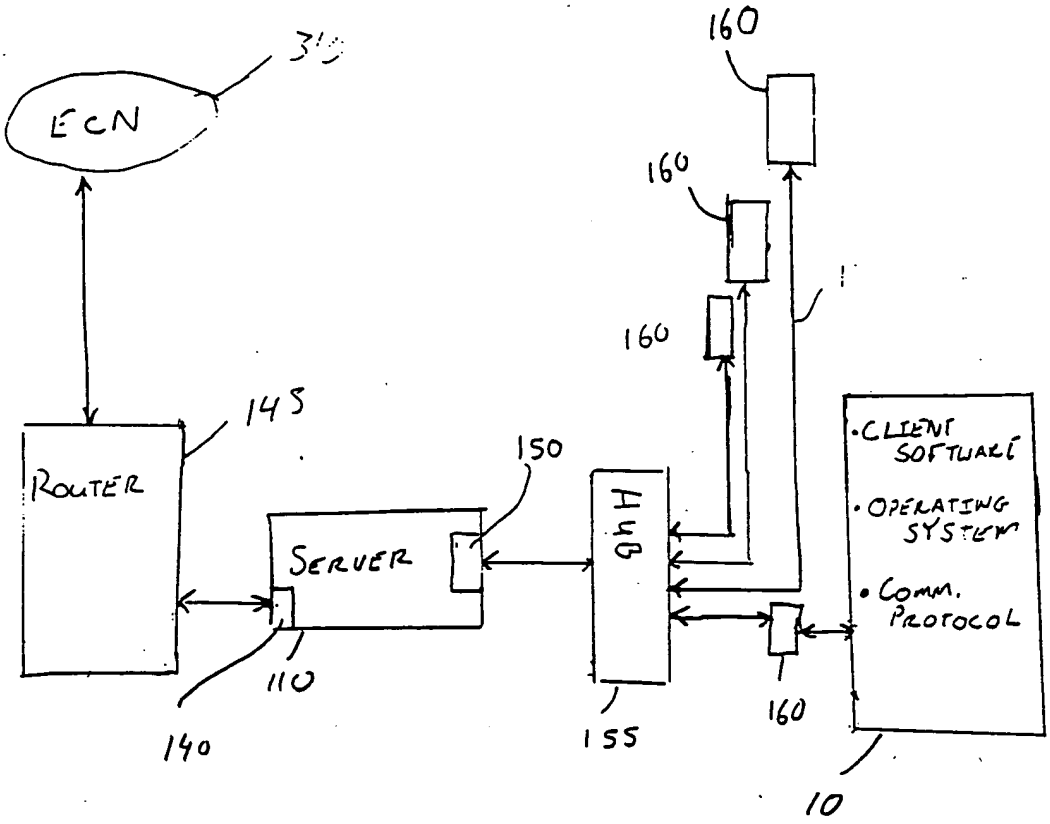

ECN
315
160
160
160
145
ROUTER
150
SERVER
HUB
• CLIENT SOFTWARE
• OPERATING SYSTEM
• COMM. PROTOCOL
110
140
155
160
10

FIG. 5

FIG. 6A

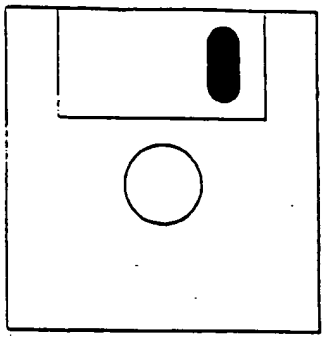


FIG. 6B

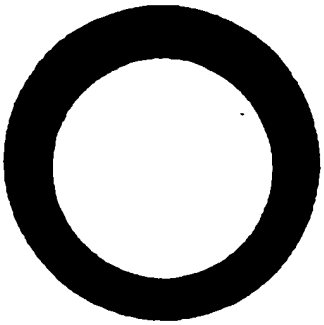
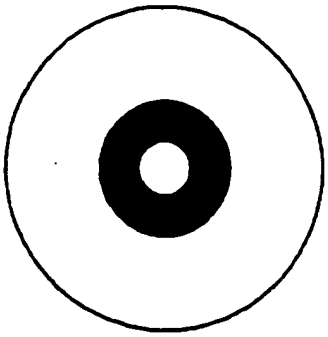


FIG. 6C



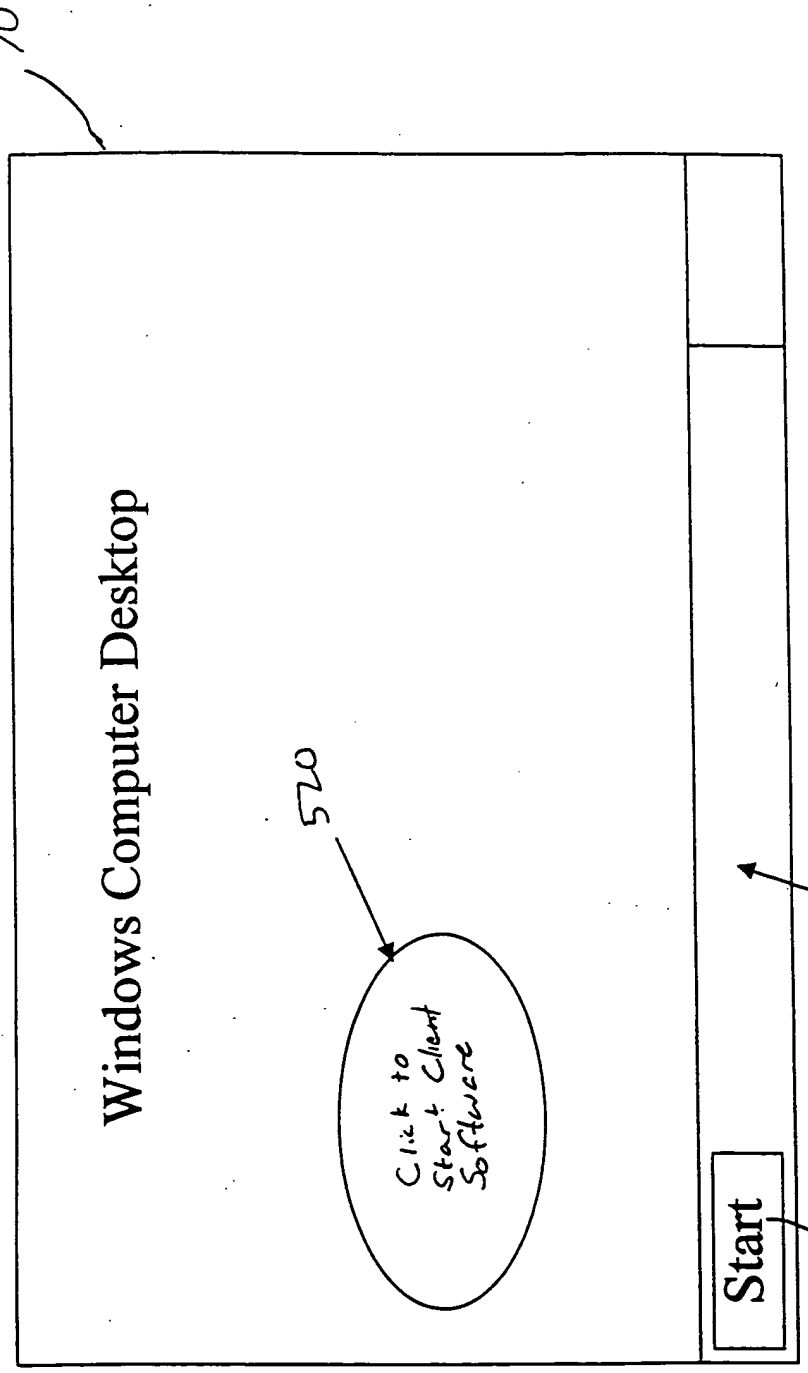

70
Windows Computer Desktop
520
Click to Start Client Software
510
Start
515

FIG. 7

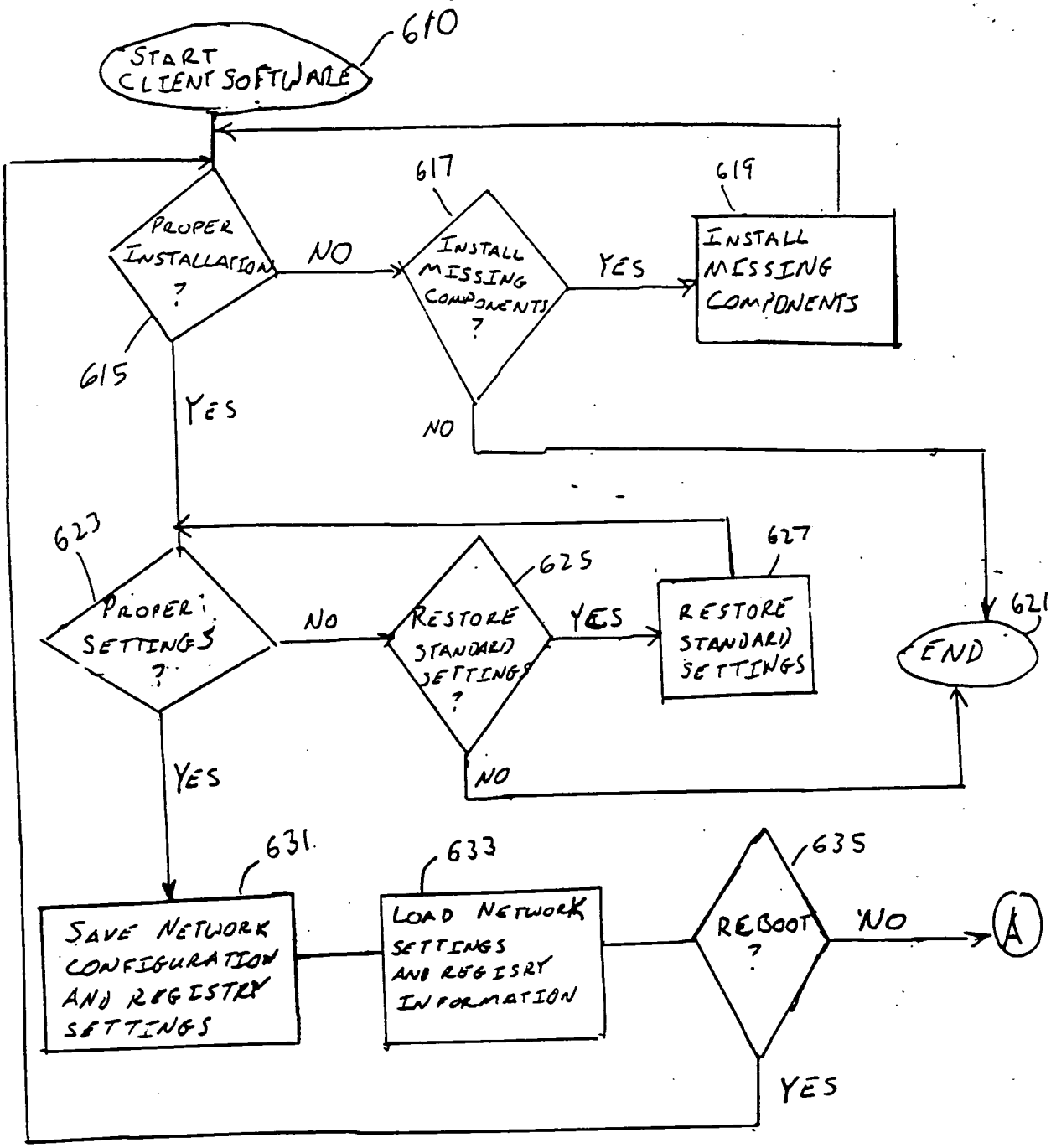

610
START CLIENT SOFTWARE
617
PROPER INSTALLATION ?
NO
INSTALL MISSING COMPONENTS ?
YES
619
INSTALL MISSING COMPONENTS
615
YES
NO
623
PROPER SETTINGS ?
NO
625
RESTORE STANDARD SETTINGS ?
YES
627
RESTORE STANDARD SETTINGS
621
END
YES
NO
631
SAVE NETWORK CONFIGURATION AND REGISTRY SETTINGS
633
LOAD NETWORK SETTINGS AND REGISRY INFORMATION
635
REBOOT ?
NO
A
YES

FIG. 8

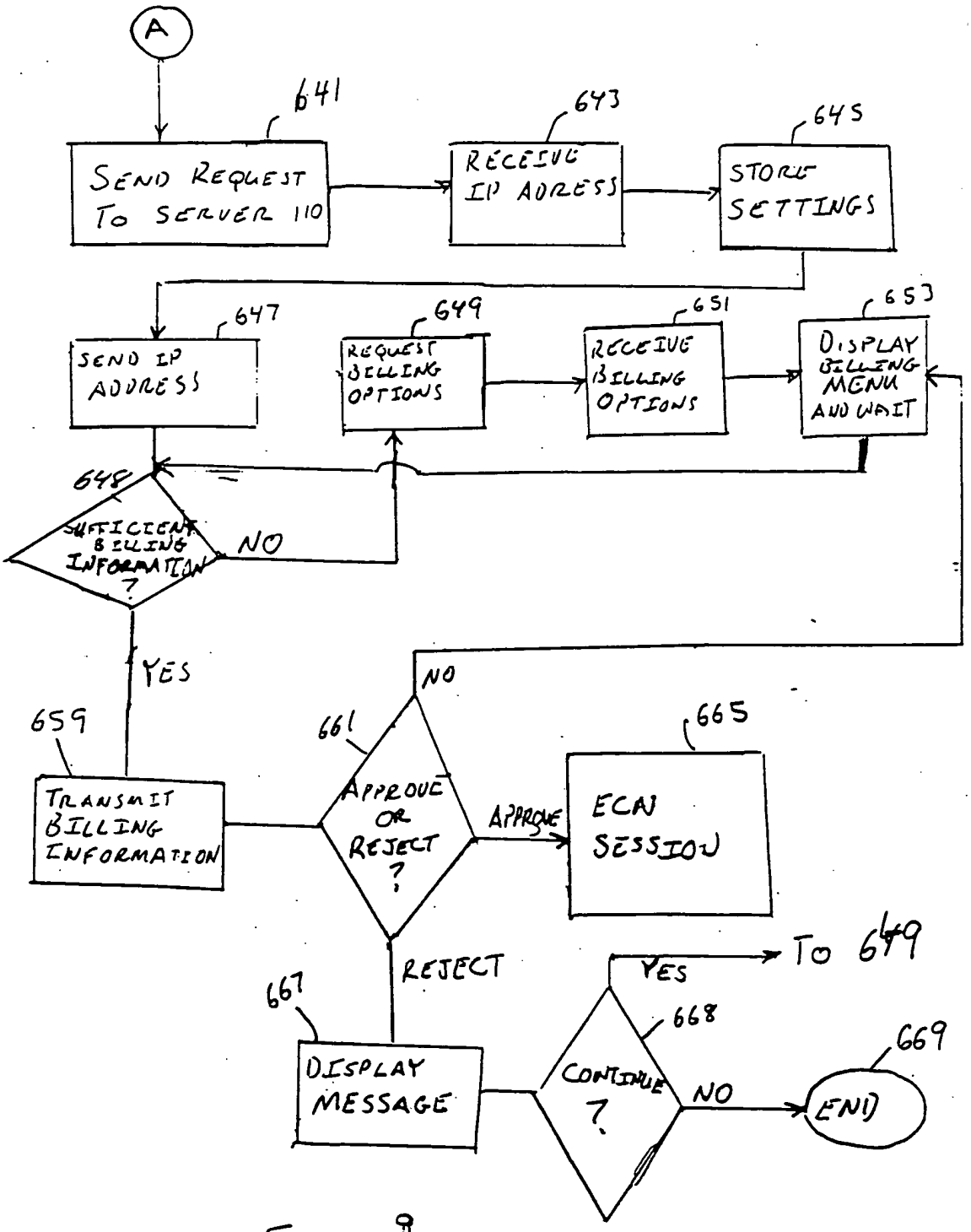

A
641
SEND REQUEST TO SERVER 110
643
RECEIVE IP ADDRESS
645
STORE SETTINGS
647
SEND IP ADDRESS
649
REQUEST BILLING OPTIONS
651
RECEIVE BILLING OPTIONS
653
DISPLAY BILLING MENU AND WAIT
648
SUFFICIENT BILLING INFORMATION ?
NO
YES
659
TRANSMIT BILLING INFORMATION
661
APPROVE OR REJECT ?
NO
APPROVE
665
ECAI SESSION
REJECT
667
DISPLAY MESSAGE
668
CONTINUE ?
YES
To 649
669
END
NO

FIG. 9

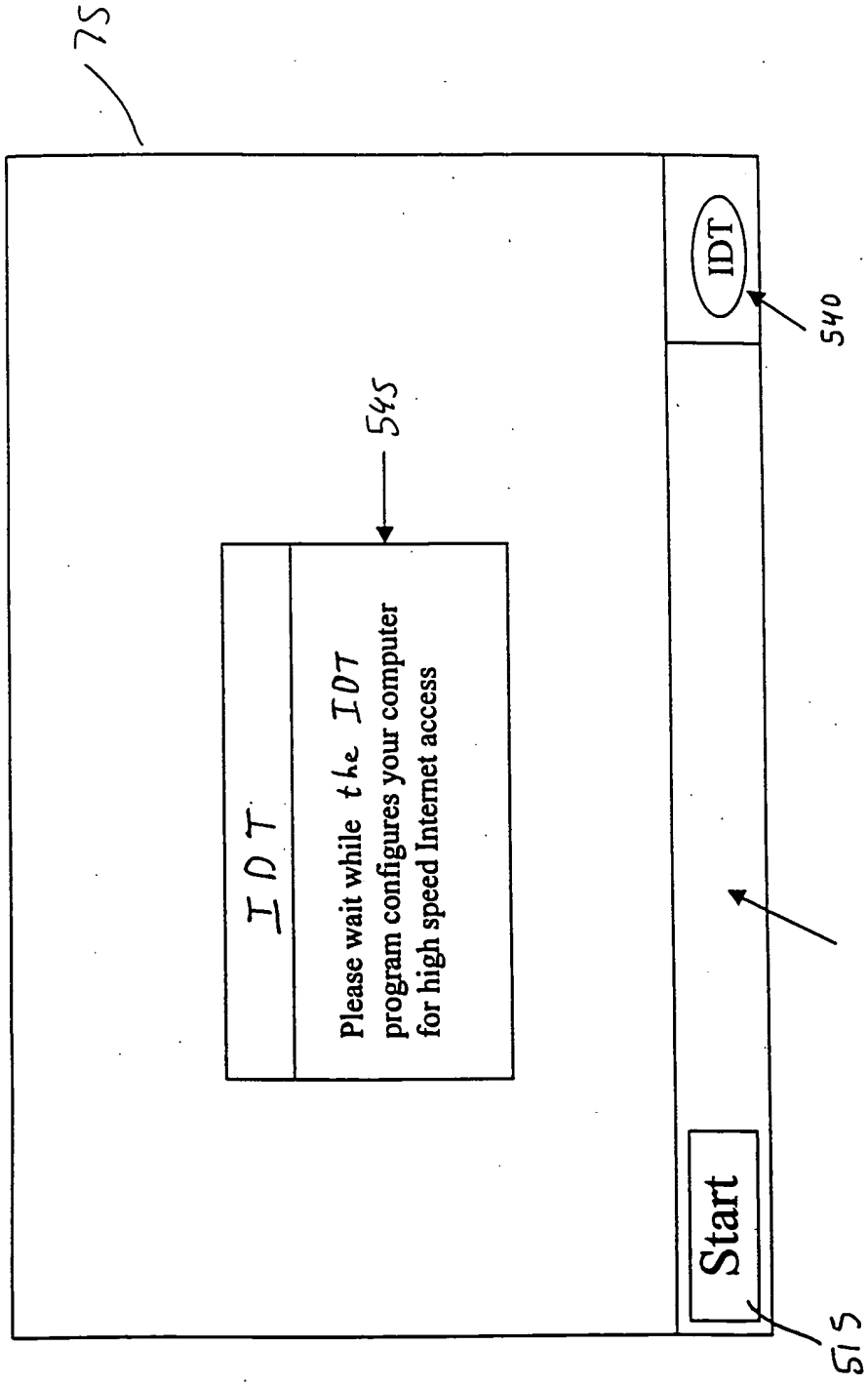

75
IDT
540
545
IDT
Please wait while the IDT program configures your computer for high speed Internet access
510
Start
515

FIG. 10

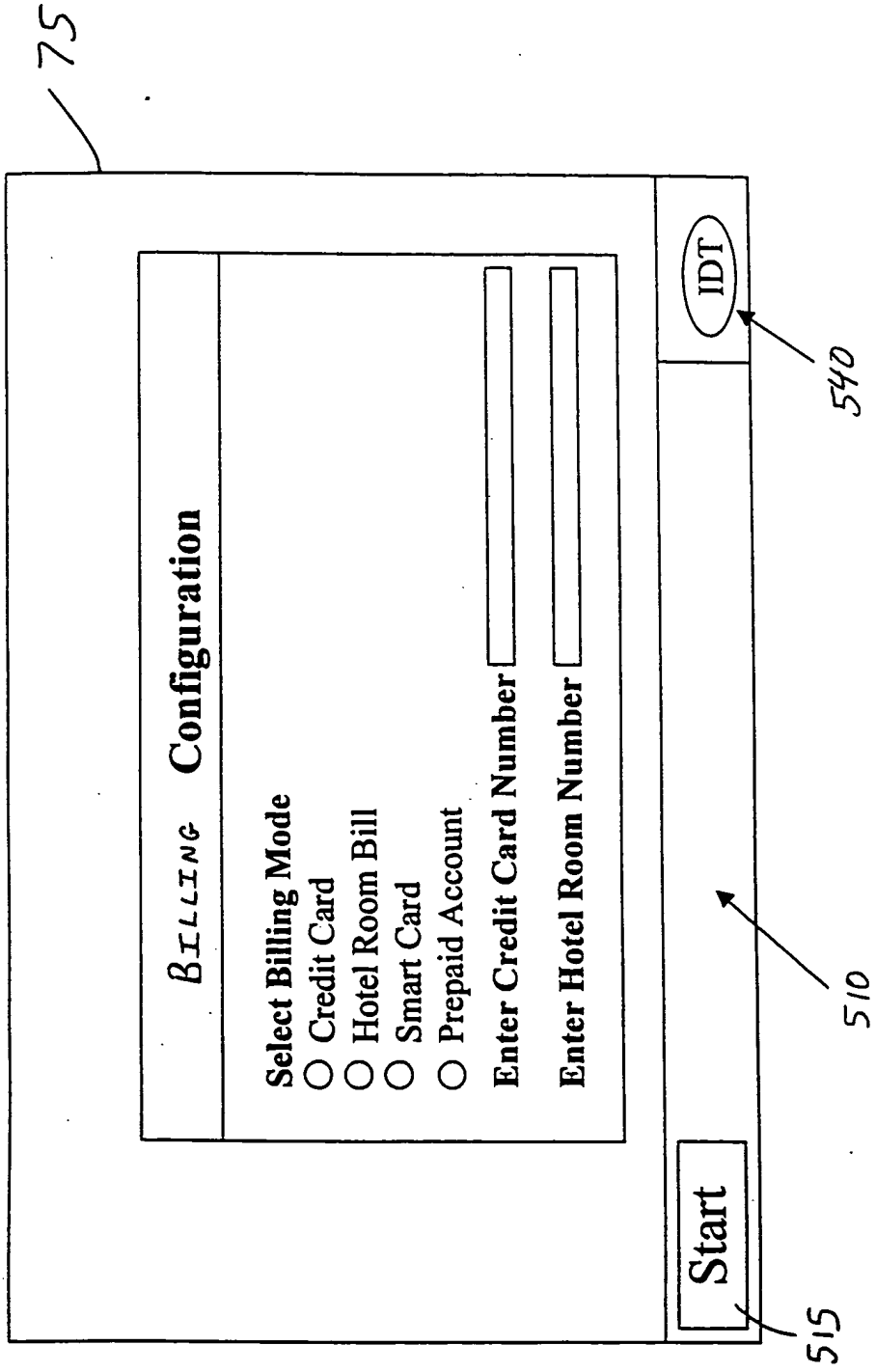

75
Billing Configuration
Select Billing Mode
Credit Card
Hotel Room Bill
Smart Card
Prepaid Account
Enter Credit Card Number
Enter Hotel Room Number
IDT
540
510
Start
515

FIG. 11

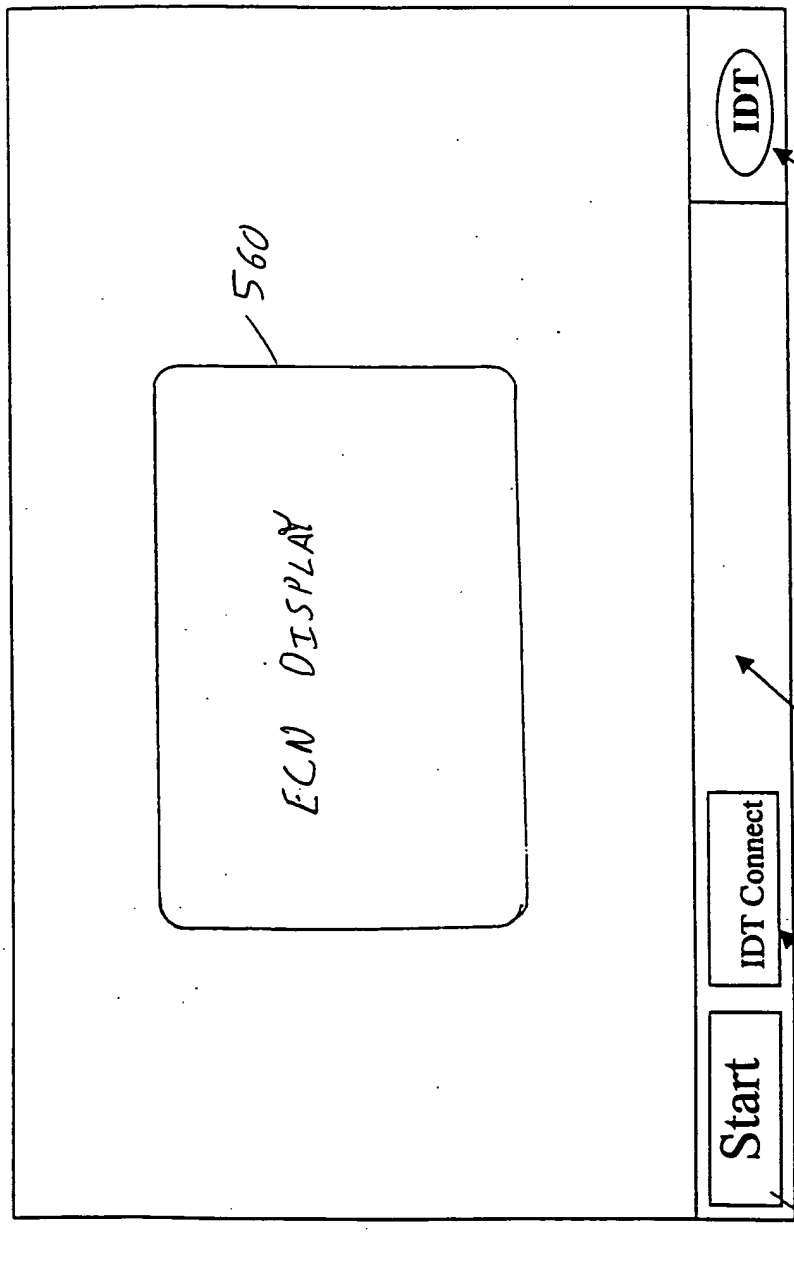


FIG. 12

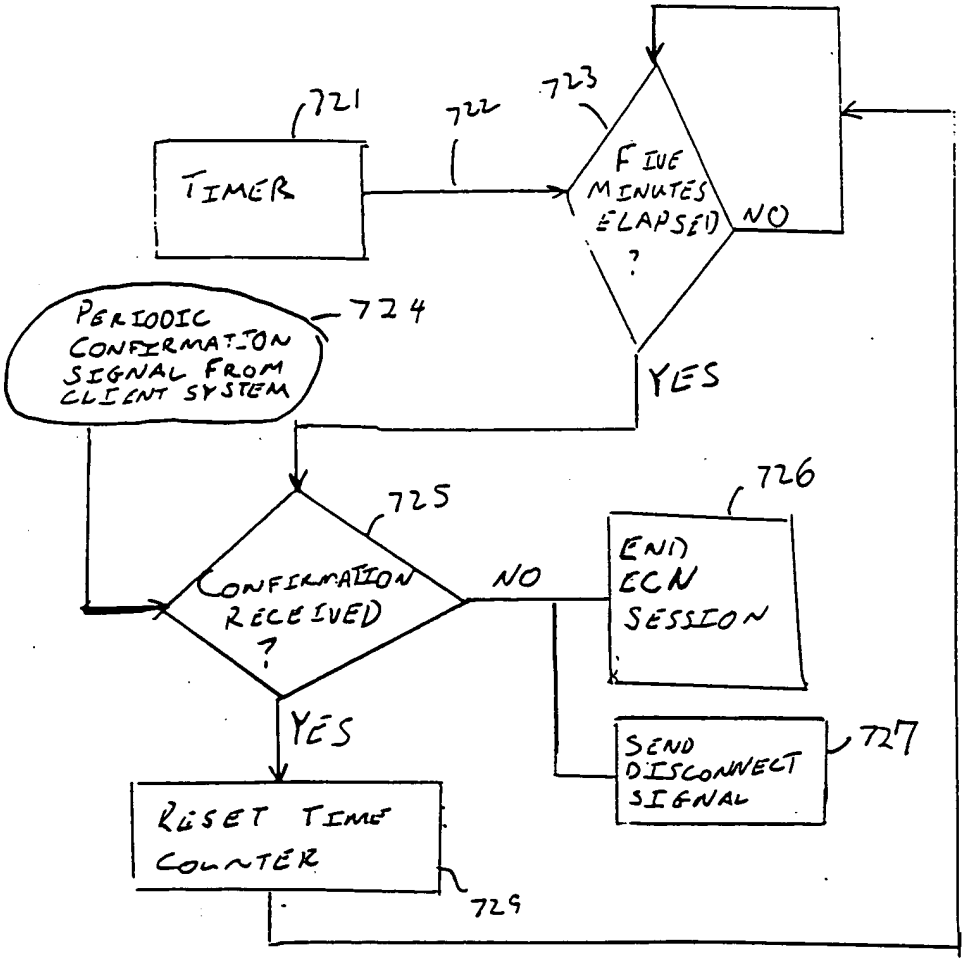

721
TIMER
722
723
FIVE MINUTES ELAPSED ?
NO
YES
PERIODIC CONFIRMATION SIGNAL FROM CLIENT SYSTEM
724
725
CONFIRMATION RECEIVED ?
NO
YES
726
END ECN SESSION
SEND DISCONNECT SIGNAL
727
RESET TIME COUNTER
729

FIG. 13

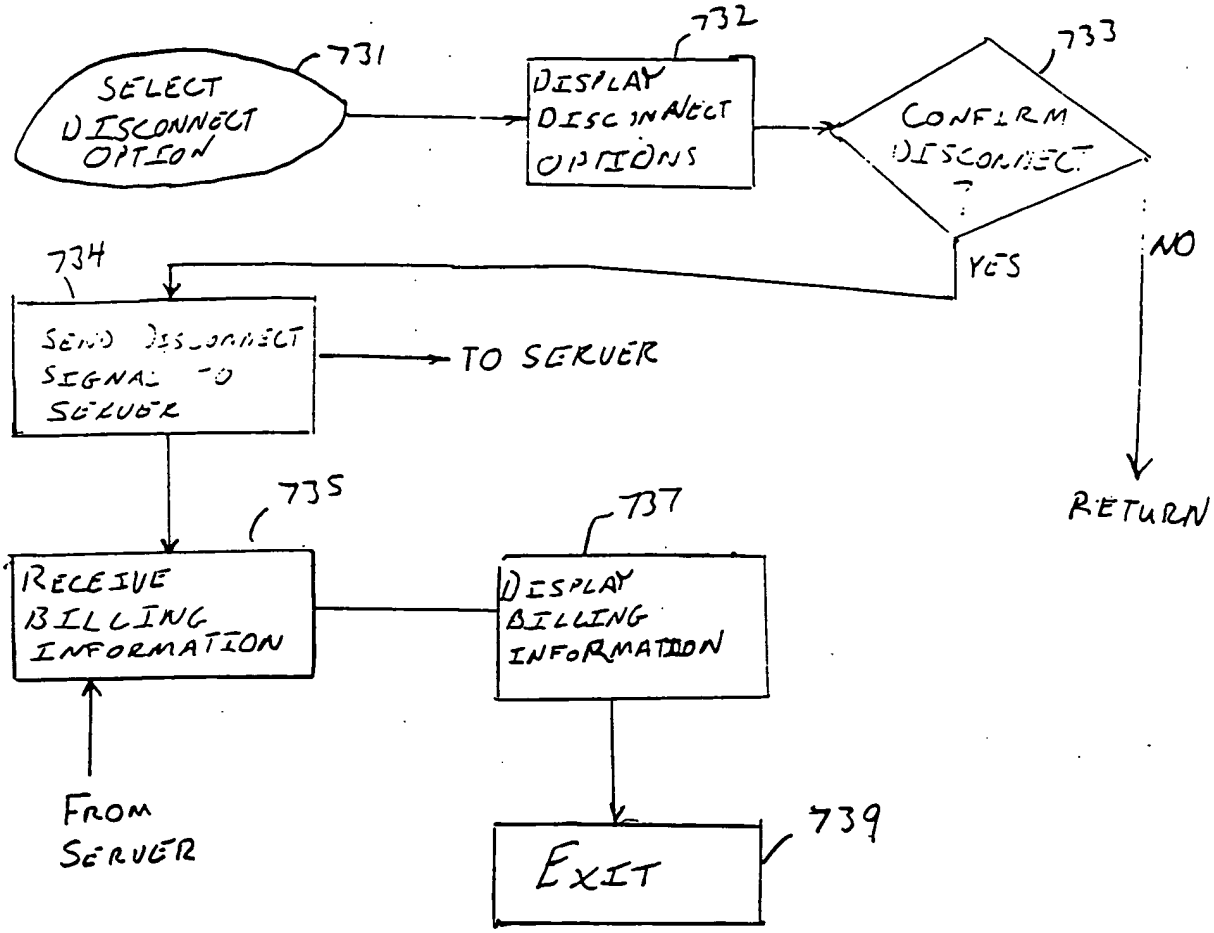

731
SELECT DISCONNECT OPTION
732
DISPLAY DISCONNECT OPTIONS
733
CONFIRM DISCONNECT ?
YES
NO
RETURN
734
SEND DISCONNECT SIGNAL TO SERVER
TO SERVER
735
RECEIVE BILLING INFORMATION
737
DISPLAY BILLING INFORMATION
FROM SERVER
739
EXIT

FIG. 14

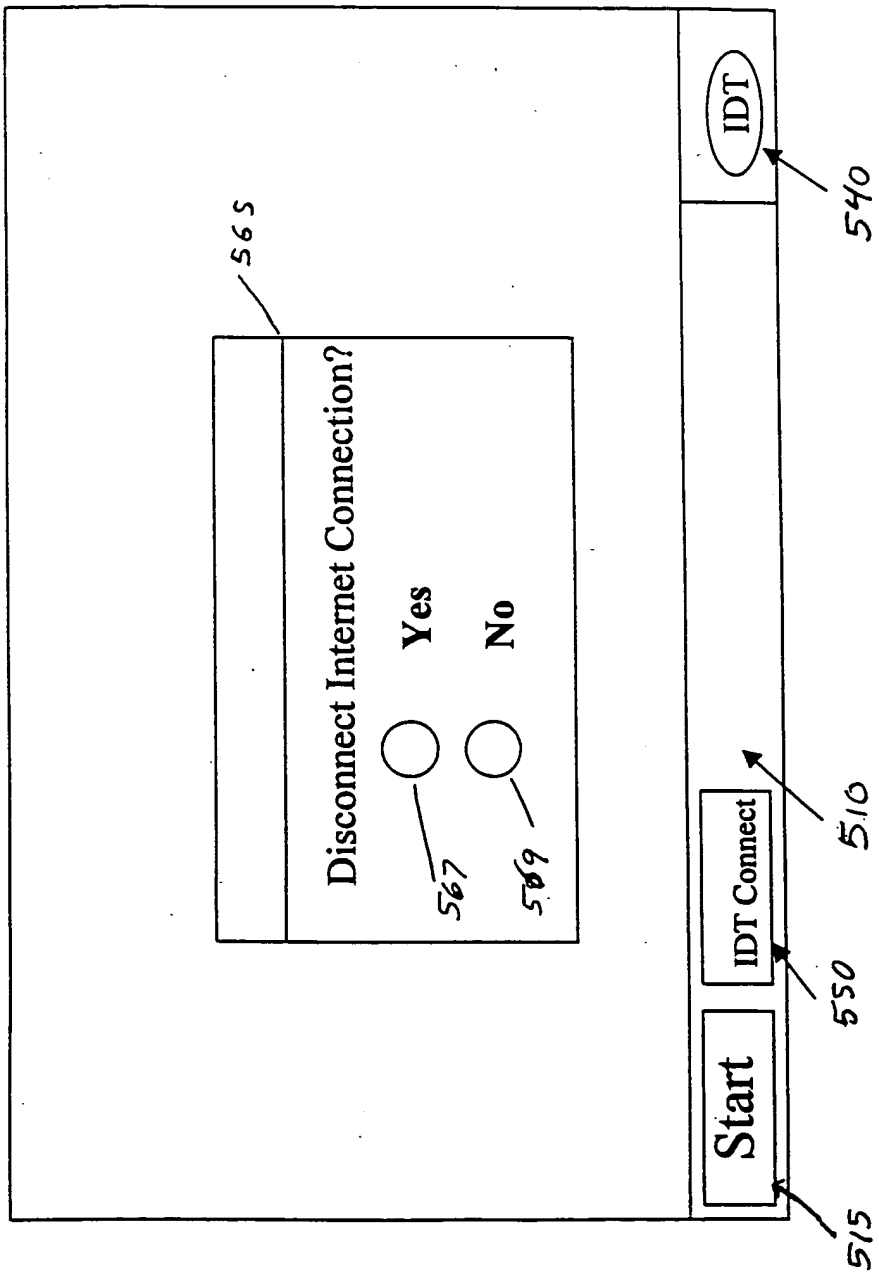

IDT
540
565
Disconnect Internet Connection?
Yes
No
567
569
IDT Connect
510
550
Start
515

FIG. 15

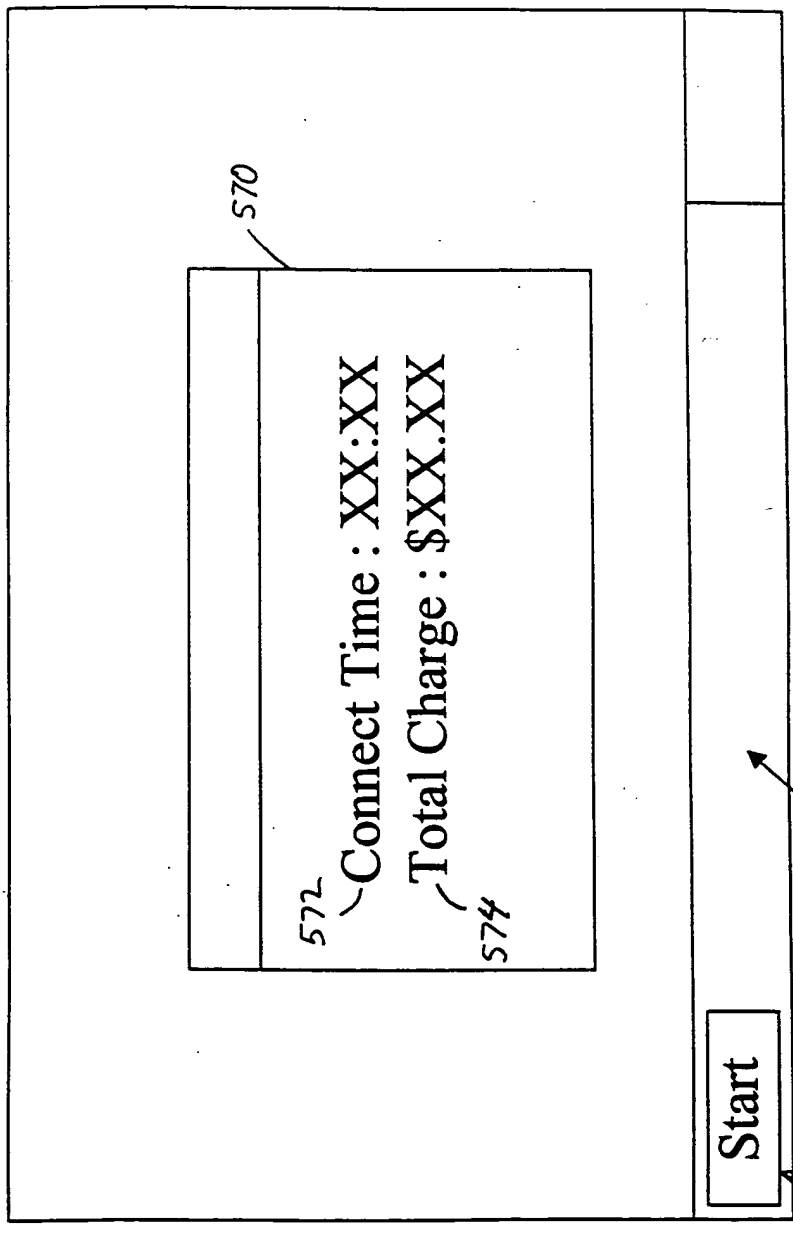

570
Connect Time : XX:XX
Total Charge : $XX.XX
572
574
510
Start
515

FIG. 16

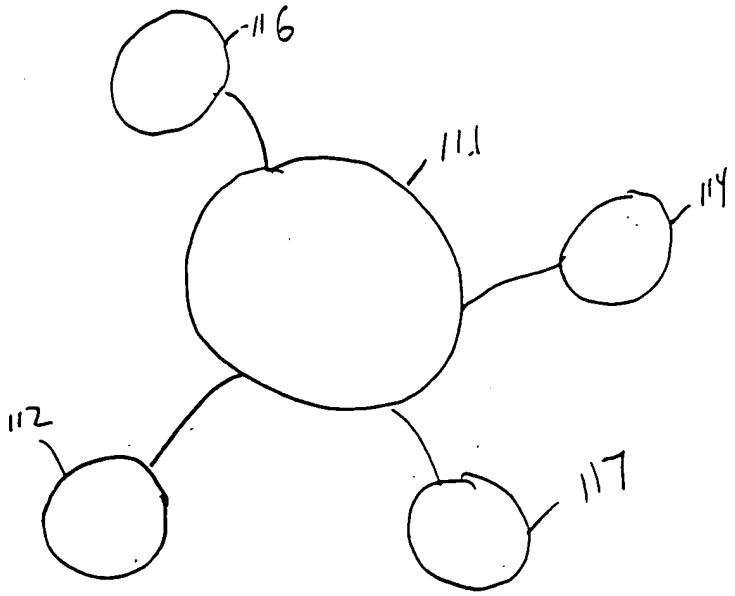


FIG. 17

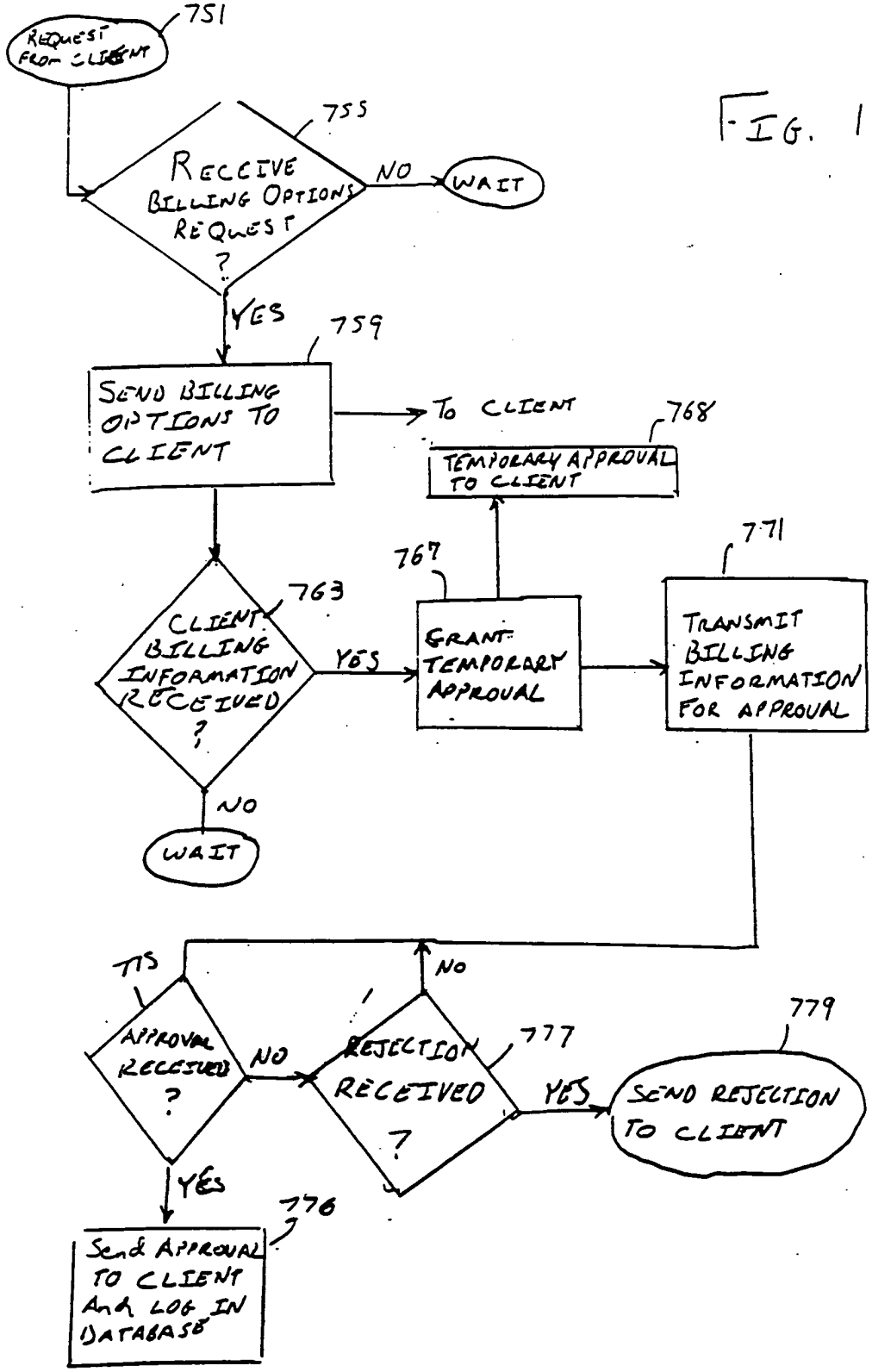

REQUEST FROM CLIENT
751
RECEIVE BILLING OPTIONS REQUEST ?
755
NO
WAIT
YES
SEND BILLING OPTIONS TO CLIENT
759
TO CLIENT
TEMPORARY APPROVAL TO CLIENT
768
CLIENT BILLING INFORMATION RECEIVED ?
763
YES
GRANT TEMPORARY APPROVAL
767
TRANSMIT BILLING INFORMATION FOR APPROVAL
771
NO
WAIT
APPROVAL RECEIVED ?
775
NO
REJECTION RECEIVED ?
777
NO
YES
SEND REJECTION TO CLIENT
779
YES
SEND APPROVAL TO CLIENT AND LOG IN DATABASE
776

FIG. 18

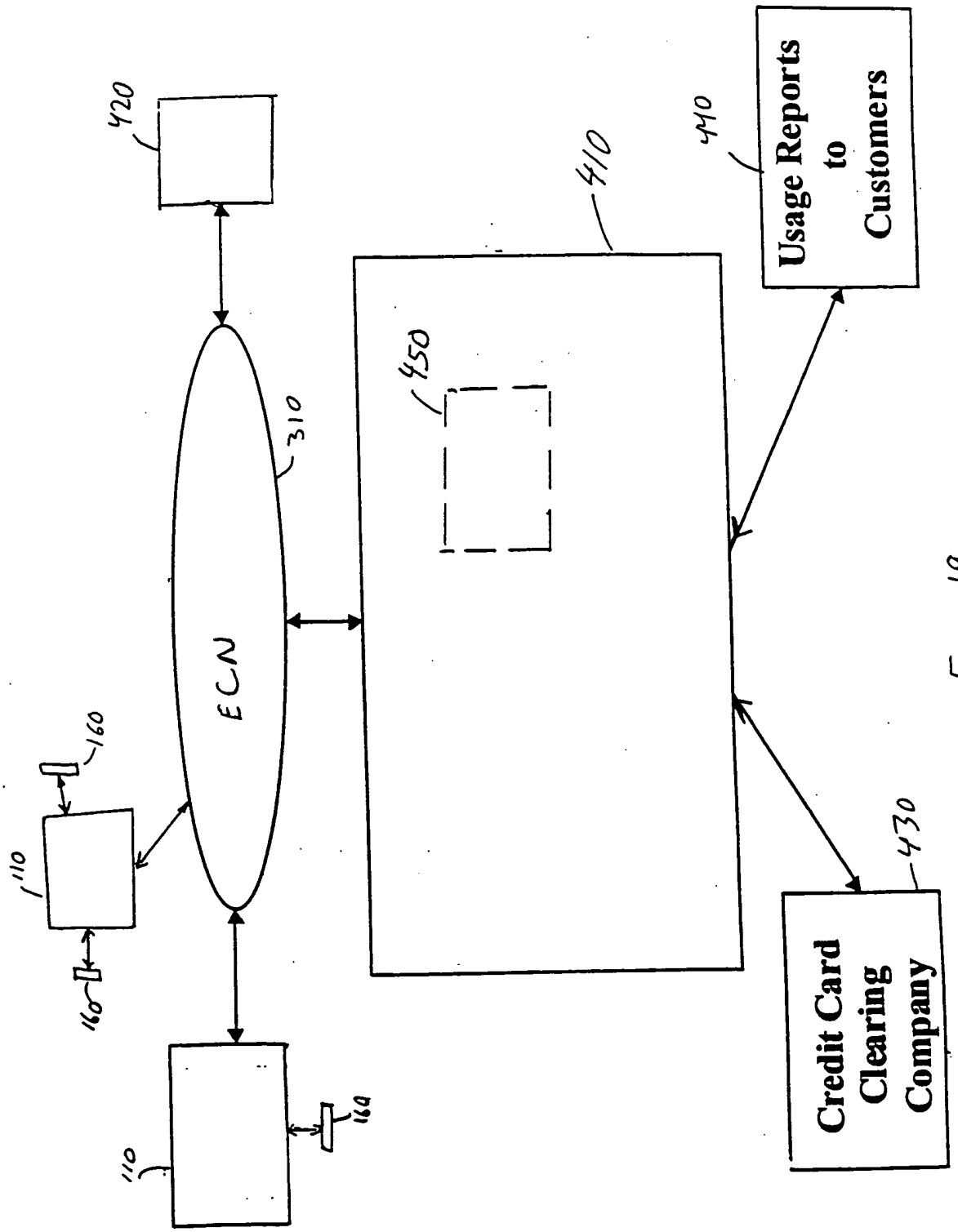

420
410
440
Usage Reports to Customers
450
310
ECN
160
110
160
110
160
Credit Card Clearing Company
430

FIG. 19

PORT ID	ACCESS PORT 1	ACCESS PORT 2	ACCESS PORT N
CLIENT IP ADDRESS	XXX	YYY	NNN
CLIENT NETWORK CARD MAC ADDRESS	XXX	YYY	NNN
SERVER NETWORK CARD ID	XXX	YYY	NNN
USER NAME	XXX	YYY	NNN
CHARGE TYPE	XXX	YYY	NNN
CREDIT CARD NUMBER	XXX	YYY	NNN
CREDIT CARD HOLDER NAME	XXX	YYY	NNN
CREDIT CARD EXPIRATION	XXX	YYY	NNN
PORT STATE	XXX	YYY	NNN
ACCESS CARD NO.	XXX	YYY	NNN
⋮	⋮	⋮	⋮

FIG. 20

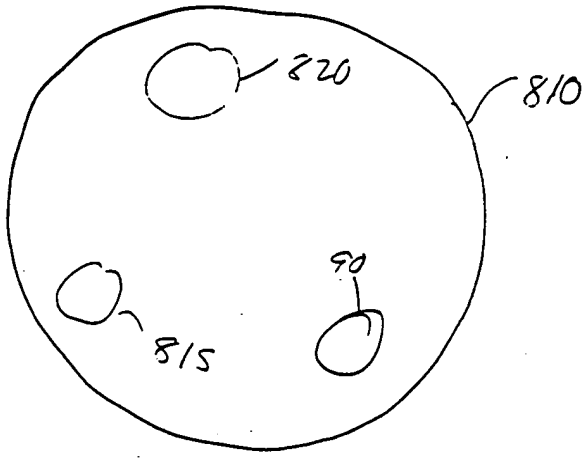


FIG. 21